

## INSTITUTIONAL EVALUATION: CAN IT CONTRIBUTE TO IMPROVING UNIVERSITY PERFORMANCE?

Australian universities, like their counterparts in other western countries, are increasingly operating under financial constraints which have accentuated the need for improved planning and administration. These financial pressures have stimulated interest in techniques for assessing system, institutional, and sub-unit performance. Following the report of the Williams Committee with its recommendations for extending research into institutional and system performance<sup>1</sup>, and the establishment of the Evaluative Studies Program by the Tertiary Education Commission<sup>2</sup>, most universities are engaging in evaluative studies intended to yield information which will assist endeavours to improve institutional performance. Some of the Australian and overseas experience with institutional evaluation and review has been reported by Clarke and Birt<sup>3</sup>, Holdaway<sup>4</sup>, Calvert<sup>5</sup>, and Harman and Johnston<sup>6</sup>.

However, there are substantial obstacles confronting these endeavours. First, the basic institutional processes are not well understood and so the meanings of the terms "performance" and "management" in the university setting are not completely clear. Hence, it is not possible to define exactly what is to be evaluated. Second, adequate measurement techniques and judgement procedures are not available and so there is a substantial gap between what is desirable in an evaluation and what is achievable. Third, the results from evaluative studies are generally not in the form that can be readily utilized by decision-makers in attempts to improve performance. Current evaluative studies often provide results which are fragmented assessments relating to a set of arbitrary dimensions of "performance". The dimensions are generally only tenuously related to any model of institutional operation or to notions of effectiveness and efficiency. Hence the assessments do not provide much guidance in choosing among alternative courses of action<sup>7</sup>. This paper examines the problems involved in assessing the performance of universities and their sub-units (faculties, schools or departments), and the strengths and weaknesses of the evaluation techniques available. The starting point for this examination is a consideration of the basis for evaluation provided by Chapter 18 of the Williams Report. The limited foundation provided by the Williams Report is supplemented by drawing upon the relevant research literature in an attempt to contribute to the provision of a sound basis for evaluation endeavours.

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### The purposes and uses of evaluation

Chapter 18 of the Williams Report deals specifically with one of the items in the terms of reference which directed the Committee to advise on the "means of evaluating the quality and efficiency of the system". The Committee associated the increasing concern with evaluating quality and efficiency with the greatly increased financial burden of supporting education, the allegations of mismatches between supply and demand for graduates, and the failure of education to achieve desired social objectives. The Committee supported its recommendations for the extension of evaluative studies by a conceptual analysis and suggestions for evaluation checklists relating to various components of the system. The Committee reported that fewer submissions were received in relation to this item of the terms of reference than in relation to any other, and acknowledged that:

*interest in evaluating the quality and efficiency of the education system has grown faster than the capacity to do the evaluation.*

The Committee's review of current arrangements for evaluation reveals the lack of both evaluative focus and rigour in the current scattered and disjointed evaluation practices. Unfortunately, the Committee's own discussion of the topic is superficial; it draws upon no theoretical or empirical foundation, and there is a lack of rigour in its analysis of the concepts and problems.

One deficiency in the Report is the absence of any discussion of what is meant by "evaluation" and the ways in which evaluation is distinguished from other decision-making activities. Evaluation is a complex process as the substantial literature on educational evaluation attests. Feasly<sup>8</sup> has recently identified nine different uses of the term "evaluation". The first is to regard evaluation as measurement and to focus on the data and the formalised instruments and standardised scales involved in producing results that are comparable and replicable. By contrast, evaluation may be seen as professional judgement in which visitation teams and peer review provide the means of judgement. A different focus is to regard evaluation as a comparison of actual outcomes with the objectives or intended outcomes. Alternatively, there is "goal-free" or responsive evaluation which attempts to look at all outcomes including the unintended effects. Evaluation may also be regarded as a political process

aimed at conflict resolution through negotiation. A related notion is to use evaluation as a means of reducing complacency or as a means of achieving changes. Following on from this, evaluation may be regarded as a process designed to produce useful information for decision-making in relation to attempts to improve the system or programme. Finally, evaluation may be undertaken merely as a ritual to provide a picture of rationality and accountability which promotes a feeling of security.

### Quality and efficiency

The basis of the Williams Committee's discussion of evaluation is an analysis of the terms "quality" and "efficiency". The Committee's contribution was to provide dictionary definitions of these terms. Quality is defined as a "degree of excellence". Since the complex concept of "excellence" is not analysed, the meaning of quality is not greatly clarified or specified. There is a considerable literature on educational quality which the Committee could have usefully drawn upon. Some of the most recent work includes Lawrence and Green<sup>9</sup>, Lawrence and Solomon<sup>10</sup>, and Kuh<sup>11</sup>. Astin<sup>12</sup> reviews the "five very different concepts of quality that have dominated educational research and policy during the past several decades". One view is the "mystical" conception which maintains that quality

*simply cannot be defined or measured because the activities of institutions are too complex and varied, because different institutions have different objectives, because the outcomes of higher education are too subtle, because methodological problems are insurmountable, and so on.*

A second view is the "reputational" conception of quality as coinciding with the level of prestige accorded by an opinion survey. A view promoted by educators is to equate quality with an institution's educational resources of "bright students, highly trained and prestigious faculty, and affluence". An increasingly popular approach is to relate institutional or system quality to the outcomes produced. A major difficulty with this view is that the level of outcomes may not necessarily result from institutional or system impact. This leads to the "value added" view which defines quality in relation to the impact on students; that is, the institution's contribution to their intellectual and personal development. The value-added approach directly relates quality and excellence to effectiveness. A quality institution or system is one that makes an impact; it is effective in promoting student learning. Quality or excellence in this sense can be applicable to any level of education. This contrasts with the usual meaning of the "pursuit of excellence" which relates excellence to an institution's involvement in the forefront of intellectual endeavour. Under a value-added approach a high quality institution is not

necessarily one where students achieve a high graduation standard but rather where students have been lifted substantially from their entry standard.

The Committee's discussion of efficiency is even less satisfactory than that of quality. Rather than draw upon the literature in the fields of economics and management in which the usefulness of distinguishing effectiveness and efficiency is well established<sup>13</sup>, the Committee defined efficiency as a "degree of effectiveness with which something is done". In classical management terms, effectiveness refers to the extent of goal achievement; that is, the extent to which the actual outcomes match the intended outcomes. Alternatively, in organisations such as universities where goals are problematic, effectiveness can be related to some other criteria such as success in obtaining resources or success in satisfying major constituencies. Efficiency refers to the extent to which the level of output has been achieved at least cost. The distinction between effectiveness and efficiency is important for evaluation. The evaluation of institutional or sub-unit "performance" can be regarded as having two components: assessing the level of effectiveness and assessing the level of efficiency. The notion of efficiency and the related one of "productivity" are often unwelcome in educational circles<sup>14</sup>, but it must be recognised that assessments of "efficiency" will continue to be made with varying degrees of accuracy and reliability, and so the basic question is not how to prevent them but how to improve them. There are many discussions of the meaning of efficiency and productivity in relation to education but the definitive works in interpreting these concepts in ways that are appropriate and significant in the higher education context are Toombs<sup>15</sup> and Walhaus<sup>16</sup>. The notion of efficiency in the Australian university context is discussed by Cowen<sup>17</sup> and Layton<sup>18</sup>. A review of research on the efficiency dimension of institutional performance is provided by Lindsay<sup>19</sup>. The basic issue underlying the use of these concepts is the extent to which the economic "theory of the firm", and classical business and bureaucratic models for organizations and management can be usefully applied to universities. Cohen and March<sup>20</sup> and Weick<sup>21</sup> have described an organizational model which in many ways provides a better representation of university operation than the classical models. The main organizational characteristic is ill-defined, complex, conflicting and problematic goals. The goals of universities are not clear, specific, and agreed. They change over time; are different for different groups; are often in conflict or the subject of factional conflicts; and are not readily translated into clear-cut programmes. The other characteristics include unclear and imperfectly understood technology; fluid participation in decision-making with members taking part only intermittently according to their interest in particular issues; structural looseness with relatively ill-

defined links and relatively high levels of individual and sub-unit autonomy; and widely differing criteria of success applying simultaneously as participants make judgements in the absence of measurement or market prices for outputs.

#### Evaluating effectiveness and efficiency

If the classical management perspective is adopted, the evaluation of effectiveness involves comparing outcomes with goals with the aim of making corrections where outcomes deviate seriously from those intended. From this perspective, the actual outcomes have maximum value when they are identical with the intended outcomes. This notion of evaluation combines two of the earlier conceptions of evaluation: evaluation as a comparison of outcomes and objectives, and evaluation as a basis for decisions. If a non-goal-directed organizational model is adopted, evaluations of effectiveness in a "goal-free" sense can also be undertaken by assessing the value of the actual outcomes in relation to other sets of criteria such as those of social utility.

Selecting or agreeing upon a notion of effectiveness is only the first step, however, as there are substantial methodological problems in actually making the evaluation. There are many outcomes from the institutional processes, and, as a consequence of the competition among activities for resources, producing one outcome may only be possible at the sacrifice of another. In the educational setting there is no agreed mechanism for deciding the trade-offs among multiple outcomes. Hence there is no way of deciding on an ideal outcome mix or of weighting the various outcomes to produce a single composite measure. What, for example, are the relative values of a PhD and a Bachelor's degree, or of a specific professional degree or a general degree, in deciding the trade-offs for an ideal mix of these outputs. Lindsay and Bailey<sup>22</sup> have stated this problem as follows:

*The outputs of higher education are not solely goods whose value is determined in the market place, so the relative value is only partially determined by a price mechanism. Even if a market system existed for all the outputs it would only provide one way of measuring value. The value of the outputs of higher education is a complex and normative issue; the existence of varying perspectives on the purposes of higher education will result in differing views about the value of the outputs and so many different assessments of performance may be made.*

Secondly, many of the outcomes of education are intangible and therefore not easily identified or measured. Despite the considerable efforts devoted to outcomes research in the United States<sup>23</sup>, there are still substantial deficiencies in the techniques for measuring outcomes. Thirdly, since education is only one of the many influences in the development

of individuals and the progress of society, it is difficult to isolate education's distinctive effects. These considerations present a major challenge to those engaged in evaluating effectiveness in education.

The influence of education's complexity and intangibility can also be seen in relation to the application of the notion of efficiency to educational institutions. The most appropriate concept of efficiency is one which requires the comparison of outcomes with the resources employed. In relation to efficiency in higher education, several simplistic notions are frequently used. One involves judging efficiency only in relation to cost, by assuming that a lower cost is necessarily preferable to a higher cost. For example, an institution with a cost per student of \$6,000 may be judged as less efficient than one with \$4,000, regardless of the quality of the service provided to the students. Another notion is to judge efficiency only in relation to outcomes; that is, to assume that improved outcomes are desirable regardless of cost. This notion confuses efficiency with the notions of quality and effectiveness. A third approach is to regard the crude proxy input-output measures which are available, such as costs per student or student-staff ratios, as adequate measures of efficiency or productivity and to use them in decision-making without regard to their considerable imperfections. A fourth approach is to demand a strict cost-benefit accounting of expenditures in relation to pecuniary outcomes. While the first two notions fail to recognise that efficiency involves a relationship between two variables — cost and outcomes; the third fails to recognise the gap between desirable and actual measurement capabilities; and the fourth that the non-monetary benefits may well outweigh the monetary benefits.

Thus, the substantial methodological problems involved in measuring outcomes hinder the evaluation of efficiency just as they do in relation to effectiveness. There is some danger, however that these problems will be ignored or discounted simply to suit educational fashion or political expediency. The dangers of simplistic approaches to efficiency in education have been amply documented<sup>24</sup>. Until the methodology for measuring outcomes is substantially improved, the assessment of educational effectiveness and efficiency will remain only partial and the results from any evaluation enterprise should be used with due regard to their limitations.

#### The unit of analysis

Different evaluation techniques are required for different units of analysis. Evaluation can take place using any unit of analysis from the individual student, through the programme departmental and institutional levels, to the sector and system levels. As the level becomes more aggregated the availability of techniques and the amount of previous research becomes progressively less. One outcome of this has been the rather dubious practice of using

the techniques designed for one level of evaluation at a more aggregated level<sup>25</sup>. Each level is not merely an aggregated version of the level below. For example, an education system is not simply a

*large accumulation of individuals, curricula and projects... Hence an education system evaluation must be viewed as requiring a number of considerations which are unique to and different from those appropriate for the evaluation of individuals or curricula<sup>26</sup>.*

Also, the notion of "performance" is more complex and intangible for the more aggregated levels, and universities do not have a developed capability of undertaking such evaluations. Despite the current pressures, institutions must avoid the temptation to transfer the techniques for evaluating individual staff members to the departmental and institutional levels, or to borrow inapplicable personnel and organizational evaluation techniques from the business world.

#### The Institutional Self-Study Approach

The specific proposals for evaluation made by the Williams Committee are in the form of a number of checklists for use in assessing the role of governments and coordinating bodies, and for assessing the performance of institutions.

The Committee did not make suggestions for evaluation at the system or sector levels. Johnstone<sup>27</sup> provides the most useful introduction to system-level evaluation. He suggests the use of a series of input, process, and output indicators which are generally defined as ratio rather than gross variables. Useful analyses can then be undertaken by studying trends in the indicators over time within one education system or by comparing the levels of indicators across a number of systems. Other but less comprehensive discussions of educational system indicators are provided by the OECD<sup>28</sup>, and Rossi and Gilmartin<sup>29</sup>. The Williams Committee did make the claim that "the Australian community has, however, been well served by its system of education"<sup>30</sup>, but did not directly relate this claim to any of the data or evidence appearing elsewhere in the Report. Even though many existing measures such as participation rates by age, sex, level and type of study; graduation and attrition rates; real resources per student; student-academic staff ratios; and student-total staff ratios are examined in the Report there is no attempt to discuss the systematic use and interpretation of these measures as indicators of the system's performance.

Useful studies of such indicators over time within a system have been previously carried out by Woodhall and Blaug<sup>31</sup> in their study of productivity trends in the British university system from 1938 to 1962; by O'Neill<sup>32</sup> who studied trends in the ratio of credit hours to costs in American higher education; by Hettich<sup>33</sup> who undertook a study of Canadian uni-

versities along similar lines to that of Woodhall and Blaug; by Harris<sup>34</sup> in his extensive "statistical portrait" of American higher education; and by Williams<sup>35</sup> in his study of real resources per student in Australian universities.

It must also be recognised that the Williams Committee's checklists, which were not intended to be comprehensive, are also largely non-operational; that is, they cannot be applied and answered without a specification of the meaning of some terms used in the questions. For example, the terms "consistent", "effective", and "reasonable" are used without any specification as to how to judge whether or not the particular attribute meets the appropriate level. In supporting a checklist approach the Williams Committee is recommending that institutions engage in a particular type of self-study. This type of approach, which has a long history in the United States in the form of institutional research and accreditation assessments, has recently been given a great deal of attention culminating in the comprehensive evaluation techniques for studying individual institutions and their sub-units which have been proposed by Dressel<sup>36</sup> and Miller<sup>37</sup>. Miller, for example, suggests an examination of ten dimensions of the academic enterprise:

- Goals and objectives
- Students' learning
- Faculty performance
- Academic programmes
- Institutional support services
- Administrative leadership
- Financial management
- Governing board
- External relations
- Institutional self improvement

For each area a number of criteria in the form of questions are suggested; for example, in relation to Students' Learning, Miller suggests five criteria:

- How do students rate their advising and counselling system?
- Are retention rates reasonable?
- Is an array of individualised and compensatory learning resources available?
- How effective is the student affairs administration?
- Is satisfactory progress evident towards learning goals?

While some attempts have been made to develop standardised and reliable instruments for some of these dimensions, much of the assessment must be based on judgements by the evaluators, who may be the institution's staff or visitation teams involved in peer review. As this type of evaluation technique does not include any means of specifying the standards for use in making comparisons or judgements, the results are likely to be highly subjective and unreliable. Although the use of peer review is an attempt to introduce some comparability or stan-

dardisation into this process, the American literature on accreditation and self-study attests to the very limited gains in reliability from this strategy<sup>38</sup>.

A more sophisticated approach has been the development of standardised instruments for making measurements on some institutional dimensions. These instruments include the measures of student learning and outcomes developed by the Educational Testing Service (ETS), the American College Testing Program (ACT), and the National Center for Higher Education Management Systems (NCHEMS); the College and University Environment Scales (CUES); the Institutional Functioning Inventory (IFI); the Institutional Goals Inventory (IGI); and the many techniques for analysing costs, staff activities, and space utilisation developed by NCHEMS and other agencies. A number of useful reviews of these instruments are available<sup>39</sup>. For the dimensions concerned, these instruments provide the most suitable means of assessment, although they also are by no means perfect.

There are a number of difficulties with the self-study approach. Questions may be raised in relation to how well the dimensions used in the checklists represent the performance of an institution or department. The inclusion of most dimensions appears to be based on commonsense or administrative folk-lore rather than on the basis of a theoretical or empirical foundation. Even though institutional processes are not well understood, it is still desirable that each dimension be justified in relation to some overall concept or model of "institutional performance". One consequence of the absence of a theoretical framework underpinning the institutional self-study approach is that the approach does not provide any mechanism for weighting the assessments for the disparate dimensions and aggregating them into an overall assessment of performance. Thus a good deal of responsibility and power is given to those who try to synthesize the results and judge the overall performance.

Making separate assessments in relation to each dimension means that the institutional self-study approach does not necessarily provide information about effectiveness and efficiency. To do so, the criteria for assessing each of the dimensions which concern outcomes must involve, on the one hand, comparisons with intended outcomes, and on the other, with costs or resources used. Assessment of the former type is much more commonly implied in the dimensions and criteria proposed; the institutional self-study approach is thus largely concerned with assessments of effectiveness rather than efficiency.

Some of the problems of the institutional self-study approach may be alleviated if the evaluation of the institution is undertaken on a regular basis.

Because a comprehensive self-study tends to be time consuming and costly, it is often undertaken as a "one shot" evaluation. However, if the institution is studied regularly over a period of time, it may be possible to develop a basis for making comparisons and judgements in relation to the trends in the institution's performance. Trends in such quantitative indicators as costs per student and student-staff ratios could be usefully studied in this way, as could the results from the application of survey and other measuring instruments. In addition, if carried out frequently, non-quantitative assessments might also be useful in identifying trends in performance improvement or decline.

#### Inter-institutional comparisons

An alternative approach to institutional evaluation, which is most profitable where quantitative measures or indicators are available, is to make inter-institutional comparisons. To the extent that a set of institutions is homogeneous, comparisons can yield useful assessments of both relative effectiveness and relative efficiency. Peterson<sup>40</sup> sees the development of the inter-institutional research field as being dependent on progress in three areas:

*major standardised instruments that have institutional norms and available distribution channels, the growth of large-scale institutional data bases and related exchange procedures that make institution-based data more available, and the emergence of the computer networks with more sophisticated software for improved access and ease of data sharing.*

Sizer<sup>41</sup> sees progress as being dependent on the establishment of a central organisation to undertake a series of tasks:

- establish and agree with participating institutions a detailed data element dictionary;
- design and agree with participating institutions a methodology for collecting the data;
- collect and check the actual data;
- calculate, tabulate and circulate input and output measures and performance indicators to participating institutions;
- assist the management of the participating institutions to interpret their data;
- undertake a continuous programme of education in the use of inter-institutional comparisons.

Provided the relationships between institutions and the Commonwealth Tertiary Education Commission (CTEC) do not deteriorate further, the CTEC could continue to expand its involvement in these tasks and to involve institutions in the comparative evaluation process. Institutions however, may well feel threatened by the sharing and publication of data, particularly cost information. The central organisation needs the confidence of the institutions in order to promote inter-institutional perfor-

mance assessments, but the pervasive lack of trust which is in part an outcome of simplistic attacks on educational efficiency and the biased use of educational data for political purposes, will hinder endeavours to promote comparative research.

#### The way forward

A number of problems must be solved before institutional and departmental evaluations can make a major contribution to efforts to improve performance. A better conceptualisation is required of the dimensions of institutional performance and of the inputs and outputs to the institutional processes. Better measurement techniques and judgement procedures are required in order to produce more valid and reliable data. To be useful in management endeavours, ways must be found to relate the information from evaluations directly to effectiveness and efficiency which are two factors of major concern to management. To achieve this, ways must be found to reconcile and consolidate the often conflicting and disparate information into a weighted overall assessment. Finally, ways must be found to provide information economically, so that it is feasible to undertake continual evaluation as means of providing recent and timely information to the decision makers.

While all of the available approaches to institutional performance assessment have quite severe limitations, the one-shot attempt at comprehensive self-study based on conceptually unsound checklists appears to be the least satisfactory type of approach. It is to be hoped that future evaluation endeavours in Australian institutions of higher education are directed towards more fruitful activities. The study of institutional trends over time, and inter-institutional comparisons particularly those involving quantitative measures seem to have the most potential for providing information which is useful to management. Since Australian universities form a relatively homogeneous group, ensuring comparability poses less difficulties than for a more diverse group.

One tempting response to the quite severe limitations in current evaluative capability is to use them as justification for refraining from any attempts at institutional evaluation. The opposite response, which is now replacing the first in popularity, is to minimize or ignore the limitations in order to suit the current educational fashion for evaluation and the underlying political purposes. Neither of these responses is realistic. The lasting austerity to which Australian universities are now adjusting means that improving institutional performance and managerial capability are pressing needs. Clearly, institutional evaluation has a part to play in meeting these needs, and in any case, current pressures for evaluation, both from within and without the universities, are now irresistible. On the other hand, ignoring the absence of a sound theoretical and

empirical basis for the concepts of institutional "performance" and university "management", and for the available measurement and judgement techniques, will only result in unproductive activity which has a marginal impact on decision-making. The appropriate response is a cautious and sceptical application of the best available evaluative techniques giving due consideration to both their strengths and limitations. Institutional evaluation is still in an embryonic stage; it is under conceptualized and lacks rigorous operational models and techniques. While current evaluative activities must continue, their implicit assumptions and limitations must be recognised and efforts devoted to developing a more scholarly basis for evaluative endeavours.

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## ONE IN ALL IN: FAUSA AND THE ORIGINS OF THE ACADEMIC SALARIES TRIBUNAL

### Origins

In 1974 the Academic Salaries Tribunal was established under the Commonwealth Government's Remuneration Tribunals Act. It was founded as a Commonwealth agency with no state representation to attempt to resolve two issues: first, whether differences in the character and function of CAEs and universities implied a difference in the level of salaries to be paid to academic staff working at institutions in either sector; and second, the need to institute a mechanism to provide national guidelines for regular and equitable adjustments to academic salaries. At its inception the Tribunal was empowered to determine the salary rates for academic staff at the Australian National University and Canberra College of Advanced Education and to report to the Commonwealth Minister for Administrative Services in relation to academic salary rates for State universities and advanced education institutions. Since that time, while State Governments and State-based tertiary institutions have not been legally bound by the Tribunal's recommendations, they have generally adhered to the academic salary rates suggested. As a result, the salaries of various categories of academic staff have remained uniform across Australia.

This was not always the case. It was a series of discordant and ad hoc arrangements in the 1960s which led to the establishment of the Academic Salaries Tribunal as a Commonwealth agency. During that period public policy-making on academic salaries did not have the coherence and definition of a programme, particularly as the Commonwealth Government was sensitive to a possible accusation from the States that it was becoming involved in 'wage-fixing' in universities.

Throughout the 1960s, with considerable reluctance, the predecessor to the Universities Council of the Commonwealth Tertiary Education Commission the Australian Universities Commission (AUC), found itself inextricably involved in attempts to resolve the academic salaries issue. Despite its moves to adopt a disinterested stance, the AUC had to take part, particularly as the component of the recurrent grants devoted to academic and non-academic salaries by each university was so large.

In some ways, similar paths were followed in Britain and Australia, although parallel developments occurred a decade earlier in Britain, and the British University Grants Committee (UGC) played a more active and sustained role than its Australian counterpart, the AUC. Early in the post-war years Britain

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established a rough uniformity of academic salaries. In the 1950s the British Association of University Teachers (AUT) sought to negotiate academic salaries with the UGC and the Treasury by direct bargaining on a trade union model. During that time the UGC maintained a unique and important role in the process of reviewing academic salaries. There was no workable pattern of negotiation between employers and employees and the UGC did not act on behalf of universities but in its own right.

The AUT put up to the government successive 'claims' based on the comparability principle used by the Civil Service Commission and specifically on an attempted direct comparison with civil service salaries, arguing that the chief alternative employment for academics was the administrative or scientific class of the civil service. But this comparison was never specifically accepted by the UGC or Treasury. A 'stately minuet' developed whereby the UGC listened to the AUT, listened to the Committee of Vice-Chancellors and Principals and then made its own confidential recommendations to the government<sup>1</sup>.

In 1963 the UGC's role was significantly diminished when academic salaries were made the subject of an independent review by the National Incomes Commission. There was then a brief reversion in 1966 to the arrangement whereby the government made a decision after consultations with the UGC, which in turn consulted the AUT and the Committee of Vice-Chancellors and Principals. As this reversion was not satisfactory, in 1968 and again in 1970 an independent review was conducted by the National Board for Prices and Incomes. During that time much of the role previously undertaken by the UGC was gradually supplanted by the Department of Education and Science.

The sequence of events now to be described in Australia reflects the general direction taken in Britain, particularly the prominent role played by university staff associations and the vice chancellors' committees in both countries. Another similarity was the establishment by the respective governments of a permanent formal review mechanism outside the area of responsibility of the co-ordinating agency for universities in each country. In Australia, however, there was an added element. The tensions between Commonwealth and State levels of government complicated the evolutionary process. The States were wary of consenting to the establishment of a national agency capable of mak-